

IN THE CLAIMS:

Kindly amend claims 1-5, 12, 13, 17, 25 and 30-33, cancel claims 7-11, 14, 18, 20 and 26, and add claim 37, all as follows, without prejudice:

1. (Currently amended) A light emitting assembly comprising

a metal substrate providing an electrically insulating coating less than one thousand microns thickness;

a plurality of circuit traces on the electrically insulating coating providing terminals and conductive paths for placing light emitting elements in circuit, the terminals being of a composition compatible with metal droplet connections;

a plurality of light emitting elements having leads bonded to the terminals with metal droplets and providing a thermally conductive base having a flat section of predetermined area; and

a thermal conductor, having therein a metal, fixed relative to the substrate, spaced from and electrically isolated from the circuit traces, the entire flat section of the base of at least some of the light emitting elements being in physical contact with the thermal conductor and thereby in conductive heat transmitting relation with the thermal conductor.

2. (Currently amended) The light emitting assembly of claim \pm 25 wherein the metal substrate is selected from the group consisting essentially of aluminum, aluminum alloys, magnesium, and magnesium alloys and the electrically insulating coating is an anodized layer.

3. (Currently amended) The light emitting assembly of claim \pm 25 wherein the electrically insulating coating is a cured thick film coating.

4. (Currently amended) The light emitting assembly of claim \pm 25 wherein the electrically insulating coating is a porcelain enamel.

5. (Currently amended) The light emitting assembly of claim \pm 25 wherein the electrically insulating coating is a plasma applied coating.

6. (Previously submitted) The light emitting assembly of claim 1 wherein the thermal conductor provides a shiny metal section reflecting light from the light emitting element away from the substrate thereby increasing the reflectivity of the assembly and increasing the amount of light emitting from the assembly.

7. (Cancelled)

8. (Cancelled)

9. (Cancelled)

10. (Cancelled)

11. (Cancelled)

12. (Currently amended) The light emitting assembly of claim ~~1~~ 25 wherein the circuit traces are thin film traces.

13. (Currently amended) The light emitting assembly of claim ~~1~~ 25 wherein the circuit traces are thick film traces.

14. (Cancelled)

15. (Original) The light emitting assembly of claim 1 wherein the metal droplet is a soldered connection.

16. (Original) The light emitting assembly of claim 1 wherein the metal droplet is a wire-bonded connection.

17. (Currently amended) The light emitting assembly of claim \pm 25 further comprising a resistor in thermal contact with the substrate in circuit with the light emitting element.

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

22. (Cancelled)

23. (Cancelled)

24. (Cancelled)

25. (Currently amended) A light emitting assembly comprising
a metal substrate having a surface providing an electrically
insulating coating less than one thousand microns thickness;

a plurality of circuit traces on the electrically insulating
coating providing terminals and conductive paths between the
terminals for placing light emitting elements in circuit, the
circuit traces comprising a quantity of silver effective to make
the paths conductive, to make the terminals compatible with solder
~~and~~ or wire-bonded connections and to reflect a significant amount
of light away from the substrate; and

at least one light emitting element having leads bonded to the
terminals with solder or wire-bonded connections and having a flat
thermally conductive base, electrically isolated from the circuit
traces, ~~juxtaposed to and entirely~~ the flat base being in physical
contact with the substrate and thereby being in conductive heat
transmitting relation with the substrate.

26. (Cancelled)

27. (Cancelled)

28. (Cancelled)

29. (Cancelled)

30. (Currently amended) A light emitting assembly comprising
a metal substrate providing an electrically insulating coating
less than one thousand microns thickness;

a plurality of circuit traces on the electrically insulating
coating providing terminals and conductive paths for placing light
emitting elements in circuit, the terminals being of a composition
compatible with metal droplet connections; and

a plurality of light emitting elements having leads bonded to
the terminals with metal droplets, the light emitting elements
having a thermally conductive base, electrically isolated from the
circuit traces, providing a flat section of predetermined area, the
~~entire~~ flat section being in physical contact with the substrate
and thereby being in conductive heat transmitting relation with the
substrate.

31. (Currently amended) The light emitting assembly of claim 30
further comprising a thermal conductor fixed to the substrate, the
~~entire~~ flat section being in conductive heat transmitting relation
with the thermal conductor, the thermal conductor being in
conductive heat transmitting relation between the base of the light
emitting element and the substrate.

32. (Currently amended) The light emitting assembly of claim 30 wherein the ~~entire~~ flat section of the light emitting element is in conductive heat transmitting relation with the electrically insulating coating.

33. (Currently amended) The light emitting assembly of claim 30 wherein the insulating coating has a hole immediately under the ~~entire~~ flat section of the light emitting element is in physical contact with the substrate and thereby in conductive heat transmitting relation to the substrate through the hole.

34. (Previously presented) The light emitting assembly of claim 30 wherein the circuit traces comprise silver and glass.

35. (Previously presented) The light emitting assembly of claim 32 wherein the metal droplet connection is solder.

36. (Previously presented) The light emitting assembly of claim 32 wherein the metal droplet connection is a wire-bonded connection.

37. (New) The light emitting assembly of claim 25 wherein the base is of a predetermined area and all of the predetermined area is in physical contact with the substrate.